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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of

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Amendment of Section 73.622(b) of
the Commission's Rules, DTV
Table of Allotments
(Richmond, Virginia)

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MM Docket No.
RM No.

MAY 01 2000

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

To: The Chief, Allocations Branch

**SUPPLEMENT TO
PETITION FOR RULEMAKING**

1. Central Virginia Educational Telecommunications Corporation ("CVETC"), by its attorneys and pursuant to Section 73.623 of the Commission's rules, 47 C.F.R. §73.623, hereby supplements that certain Petition for Rulemaking filed on behalf of CVETC on November 5, 1999 in which CVETC requested that the Commission institute a rulemaking proceeding for the purpose of amending the Table of Allotments for the digital television ("DTV") service to change the DTV channel allotment for station WCVE-DT, Richmond, Virginia, from channel *24 to Channel *42. See FCC File No. BPRM-19991105ZG.

2. CVETC is the licensee of noncommercial educational television station WCVE-TV, Richmond, Virginia, which currently operates on NTSC channel *23. As the attached engineering report of Cohen, Dippell and Everist, P.C. (the "Engineering Report") indicates, this supplement proposes to increase WCVE-DT's ERP to 160 kW and correct WCVE-DT's geographic coordinates. As demonstrated in the Engineering

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Report, these technical modifications comport with the interference provisions in FCC
OET Bulletin 69 as well as the Commission's principal community coverage
requirements.

Respectfully submitted,

**CENTRAL VIRGINIA EDUCATIONAL
TELECOMMUNICATIONS
CORPORATION**

By: 

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Its Attorneys

May 1, 2000

ENGINEERING REPORT
RE PETITION FOR RULE MAKING
TO AMEND SECTION 73.622
OF THE FCC RULES BY SUBSTITUTING
UHF-TV DTV CHANNEL 42 FOR CHANNEL 24
AT RICHMOND, VIRGINIA
FCC FILE NO. BPRM-991105ZG

APRIL 2000

COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

COHEN, DIPPELL AND EVERIST, P. C.

City of Washington)
) ss
District of Columbia)

Warren M. Powis, being duly sworn upon his oath, deposes and states that:

He is a graduate electrical engineer of the University of Canterbury, New Zealand, a Registered Professional Engineer in the District of Columbia, the State of Virginia, the State of South Carolina, and Vice President of Cohen, Dippell and Everist, P.C., Consulting Engineers, Radio - Television, with offices at 1300 L Street, N.W., Suite 1100, Washington, D.C. 20005; previously employed for 15 years with the New Zealand Broadcasting Corporation; a member of the Institution of Professional Engineers New Zealand (IPENZ), the Association of Federal Communications Consulting Engineers (AFCCE), and the National Society of Professional Engineers (NSPE).

That his qualifications are a matter of record in the Federal Communications Commission;

That the attached engineering report was prepared by him or under his supervision and direction and,

That the facts stated herein are true of his own knowledge, except such facts as are stated to be on information and belief, and as to such facts he believes them to be true.

Warren M. Towne

Warren M. Powis
District of Columbia
Professional Engineer
Registration No. 8339

Subscribed and sworn to before me this 26th day of April, 2000.

day of April, 2000.

Carl L. Meyer
Notary Public

My Commission Expires: 2/28/2023

This engineering report has been prepared on behalf of Central Virginia Educational Telecommunications Corporation ("CVETC"), licensee of non-commercial educational television station WCVE-TV, Channel 23, Richmond, Virginia, to supplement its petition for rule making to amend Section 73.622(b) of the FCC Rules and Regulations, FCC File No. BPRM-991105ZG. It is proposed to increase ERP to 160 kW, correct geographic coordinates, and demonstrate compliance with the interference provision in FCC OET Bulletin 69. In the original DTV Table of Allotments adopted by the Commission in Appendix B of the Memorandum, Opinion and Order on Reconsideration of the Sixth Report and Order in MM Docket No. 87-168¹, WCVE-TV was allotted UHF Channel 24 for its DTV channel at 23 Sesame Street, Richmond, Virginia. CVETC proposal to substitute Channel 42 instead of DTV Channel 24 at Richmond, Virginia, as an amendment to FCC Rule Section 73.622(b) as follows:

Charlottesville, Virginia

Section 73.622(b); Substitute DTV Channel 42* for Channel 24*

The reference coordinates for the proposed new allotment correspond to FCC Tower Registration No. 1035535.

NAD-27

North Latitude: 37° 30' 45.5"

West Longitude: 77° 36' 05"

¹Adopted February 17, 1998, Released February 23, 1998.

*Non-Commercial educational allotment.

Allocation Situation

Tables I and II show the allocation situation for the proposed DTV Channel 42 allotment.

It is proposed to operate the Channel 42* allotment with a directional ERP of 160 kW with a radiation center of 395.3 meters AMSL. The attached Table III shows the area and population that may receive interference from the proposed operation. Table III indicates the potential interference population will not exceed the Commission's guidelines provided in its Public Notice dated August 10, 1998 (Additional Application Processing Guidelines for Digital Television (DTV)). Therefore, the proposed operation would not have any adverse impact on the existing analog or proposed DTV allotments. The proposed operation will comply with the Commission's principal community coverage requirements.

COHEN, DIPPELL AND EVERIST, P. C.

TABLE I
DTV TO NTSC UHF-TV ALLOCATION SITUATION
FOR THE PROPOSED SUBSTITUTION OF DTV
CHANNEL 42* FOR CHANNEL 24* AT
RICHMOND, VIRGINIA
APRIL 2000

<u>Channel</u>	<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Geographic Coordinates</u>	<u>Separation</u>	
					<u>Actual</u> km	<u>Required</u> km
42	0	WCVE-DT	Richmond, VA	37°30'45.5" 77°36'05"	—	—
27	-15	WGNT	Portsmouth, VA	36°48'43" 76°27'49"	127.5	>80.5
28	-14	None within 140 km			—	>80.5
34	-8	None within 140 km			—	>80.5
35	-7	WRLH	Richmond, VA	37°30'22" 77°42'03"	8.8	<12.0
38	-4	None within 140 km			—	>80.5
39	-3	None within 140 km			—	>80.5
40	-2	None within 140 km			—	>80.5
41	-1	WHTJ	Charlottesville, VA	37°58'58" 78°29'00"	93.6	>106.0
42	0	WVPY	Front Royal, VA	38°57'36" 78°19'52"	172.9	217.3
43	+1	WVBT	Virginia Beach, VA	36°49'14" 76°30'41"	123.6	>106.0
44	+2	None within 140 km			—	>80.5
45	+3	None within 140 km			—	>80.5
46	+4	None within 140 km			—	>80.5
49	+7	WPXV	Norfolk, VA	36°48'32" 76°30'13"	—	>80.5
50	+8	None within 140 km			—	>80.5

COHEN, DIPPELL AND EVERIST, P. C.

TABLE II
DTV TO DTV UHF-TV ALLOCATION SITUATION
FOR THE PROPOSED SUBSTITUTION OF DTV
CHANNEL 42* FOR CHANNEL 24* AT
RICHMOND, VIRGINIA
APRIL 2000

<u>Channel</u>	<u>Channel</u>	<u>Call</u>	<u>City/State</u>	<u>Geographic Coordinates</u>	<u>Separation</u>	
					<u>Actual</u> km	<u>Required</u> km
42	0	WCVE-DT	Richmond, VA	37°30'46" 77°36'06"	—	—
41	-1	WVEC-DT	Hampton, A	36°49'00" 76°28'06"	126.9	110.0
42	0	WMPT-DT	Annapolis, MD	39°00'36" 76°36'33"	187.5	217.3
42	0	WRAY-DT	Wilson, NC	35°49'53" 78°08'50"	192.9	217.3
43	+1	WPXW-DT	Manassas, VA	38°47'16" 77°19'49"	143.5	110.0

TABLE III
INTERFERENCE SUMMARY
WCVE-DT, CHANNEL 42, RICHMOND, VIRGINIA
APRIL 2000

A study of predicted interference caused by the proposed WCVE-DT service has been performed using a version of the Longley-Rice program as described in OET Bulletin No. 69 (July 2, 1997) and the Public Notice, "Additional Application Processing Guidelines for Digital Television (DTV)" (August 1998). The FCC's FORTRAN-77 code was modified only to the extent necessary (primarily input/output handling) for the program to run on a Windows98/Intel platform. Comparison of service/interference areas and populations indicates that this model closely matches the FCC's evaluation program. Best efforts have been made to use data and calculations identical to the FCC's program. Any slight differences are attributable to compiler, operating system and/or processor characteristics. The effect of any variance in calculated population values versus the FCC's program is minimized when differencing a given model's results, e.g., new interference equals total interference less baseline interference. The effect is further reduced for ratios of calculated population values, e.g., incremental population affected as a percent of total population served. The model employs the Longley-Rice propagation methodology and evaluates in grid cells of approximately 4 km² using 3-second terrain data sampled approximately every 0.1 km at one degree azimuth intervals with 1990 census centroids.

Baseline WCVE-DT: Allotment, Channel 24, 108.8 kW, 327 meters HAAT
 N.37°30'46"Lat., W.77°36'06"Long. (NAD-27)

Proposed Change: Omni-Directional, Channel 42, 160 kW, 329 meters HAAT
 N.37°30'45.5"Lat., W.77°36'05"Long. (NAD-27)

<u>Affected Station</u>	<u>Appendix B¹</u>	<u>Distance/Bearing</u>	<u>New Interference (% of Population Served)</u>
WVPY(TV), CH.42, Front Royal, VA Lic., 141 kW, 399 M HAAT	1.8% new interference	172.9 km/338.6°	0.4%
WVEC-DT, CH.41, Hampton, VA App., 1000 kW, 349 M HAAT	100% area match	126.9 km/127.3°	1.5%
WMPT-DT, CH.42, Annapolis, MD Allot., 349.5 kW, 265 M HAAT	95.4% area match	187.5 km/27.2°	1.1%
WRAY-DT, CH.42, Wilson, NC App., 1000 kW, 585 M HAAT	100% area match	192.8 km/194.8°	0.1%

All other stations receive no new interference.

¹From FCC Appendix B.